AP D/

PATENT
Attorney Docket No.: SONY-12100

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	Group Art Unit: 2163
Scott D. Smyers et al.	Examiner: Filipczyk, Marcin R.
Serial No.: 09/608,617	**TRANSMITTAL LETTER**
Filed: June 30, 2000	162 N. Wolfe Road Sunnyvale, CA 94086 (408) 530-9700
For: **METHOD OF AND APPARATUS FOR WRITING AND READING TIME SENSITIVE DATA WITHIN A STORAGE DEVICE**	Customer No. 28960

MS: Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Enclosed please find an Appeal Brief to the Notice of Appeal filed May 24, 2007 for filing in the U.S. Patent and Trademark Office. Also enclosed is a check in the amount of $500.00 to cover the appeal brief filing fee.

The Commissioner is hereby authorized to charge any additional fee or credit overpayment to our Deposit Account No. 08-1275. **An originally executed duplicate of this transmittal is enclosed for this purpose.**

Respectfully submitted,
HAVERSTOCK & OWENS LLP

Dated: July 20, 2007

By: Jonathan O. Owens
Jonathan O. Owens
Reg No.: 37,902

Attorneys for Applicants

CERTIFICATE OF MAILING (37 CFR § 1.8(a))
I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the U.S. Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to the: Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450

HAVERSTOCK & OWENS LLP.

Date: 7/20/07 By:

PATENT
Attorney Docket No.: SONY-12100

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent of:	Group Art Unit: 2163
Scott D. Smyers et al.	Examiner: Filipczyk, Marcin R.
Serial No.: 09/608,617	**APPEAL BRIEF**
Filed: June 30, 2000	162 N. Wolfe Road Sunnyvale, CA 94086 (408) 530-9700
For: **METHOD OF AND APPARATUS FOR WRITING AND READING TIME SENSITIVE DATA WITHIN A STORAGE DEVICE**	Customer No. 28960

Mail Stop Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In furtherance of the Applicants' Notice of Appeal filed on May 24, 2007, this Appeal Brief is submitted. This Appeal Brief is submitted in support of the Applicants' Notice of Appeal, and further pursuant to the final rejection mailed on March 28, 2007, in which Claims 1-15, 19-35 and 44-54 were rejected. Claims 16-18 and 36-43 were previously canceled. The Applicants submit this Appeal Brief to the Board of Patent Appeals and Interferences in compliance with the requirements of 37 C.F.R. § 41.37, as stated in *Rules of Practice Before the Board of Patent Appeals and Interferences (Final Rule)*, 69 Fed. Reg. 49959 (August 12, 2004). The Applicants contend that the rejections of Claims 1-15, 19-35 and 44-54 in this proceeding are in error and are overcome by this appeal.

07/24/2007 SSITHIB1 00000075 09608617
01 FC:1402 500.00 OP

CERTIFICATE OF MAILING (37 CFR§ 1.8(a))
I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the U.S. Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to the: Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450

HAVERSTOCK & OWENS LLP

Date: 7/20/07 By:

I. REAL PARTIES IN INTEREST

As the assignee of the entire right, title, and interest in the above-captioned patent application, the real parties in interest in this appeal, are:

Sony Corporation, a Japanese corporation
6-7-35 Kitashinagawa, Shinagawa
Tokyo, 141
Japan

Sony Electronics Inc., a corporation of the State of Delaware
1 Sony Drive
Park Ridge, NJ 07656-8003

per the assignment document filed on June 30, 2000.

II. RELATED APPEALS AND INTERFERENCES

The Applicants are not aware of any other appeals or interferences related to the present application.

III. STATUS OF THE CLAIMS

Claims 1-15, 19-35 and 44-54 are pending in this case. Claims 16-18 and 36-43 have been previously canceled. Claims 19-23 and 53 stand rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter on the basis that the invention does not physically transform an article or physical object to a different state or thing, or otherwise produce a useful, concrete, and tangible result and that, taken as a whole, the invention is an abstract idea and hence is non-statutory. Claims 1-15, 19-35 and 44-54 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,675,177 to Webb (hereinafter "Webb", a copy of which is attached as Exhibit A). Within this Appeal Brief, the rejection of Claims 1-15, 19-35 and 44-54 is appealed.

IV. STATUS OF THE AMENDMENTS FILED AFTER FINAL REJECTION

An Amendment and a Response was not filed by the appellants in response to the Final Office Action mailed on March 28, 2007. Therefore, the claims on appeal are as filed on February 2, 2007 in the Amendment and Response to the Office Action mailed November 2, 2006.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The invention disclosed in the present application number 09/608,617 is directed to a media storage device that records a meta data header with packets received from by the media storage device. The meta-data header includes a cycle mark value and a cycle count value. The cycle mark value has a specific pattern which is then used to locate cycle boundaries within the recorded stream of data. The cycle count value specifies the value of the isochronous cycle number on which the packet was received. The media storage device includes an embedded stream processor which is responsible for appropriately adding the meta data header to the packets within the recorded stream of data. The embedded stream processor is also integral to the playback of recorded data, and is used to retrieve data from the storage media, strip the meta data headers from retrieved data being played back and recover from any error conditions encountered during the playback of previously recorded data. The meta data headers stored within the recorded stream of data are also utilized to recover from any error conditions and resynchronize the transmission of the data during playback.

The elements of Claim 1, directed to one embodiment of the present invention, are described in the Specification at page 11, line 23 through page 12, line 10; page 13, lines 21-26; page 15, line 11 through page 16, line 26; page 20, line 24 through page 21, line 14 and the accompanying Figures 3, 4A, 4B, 5, 7 and 10. The method of writing data to a media storage device described there comprises receiving a received packet (74) of data to be written to the media storage device (40), the received packet (74) of data including a packet header (76), adding a meta data header (82) to the received packet (74) of data at the media storage device (40) thereby forming an extended packet (80) of data including both the packet header (76) and the meta data header (82) and storing the extended packet (80) of data onto a storage media (48) within the media storage device (40).

The elements of Claim 8, directed to one embodiment of the present invention, are described in the Specification at page 13, line 27 through page 14, line 13; page 15, line 11 through page 16, line 16; page 17, line 14 through page 18, line 14 and the accompanying

Figures 3, 4A, 4B, 5, 7 and 10. The method of reading data from a media storage device which has previously been stored, as described in Claim 1 above, with header data generated by the media storage device described there comprises locating a first header data (82), including a cycle mark value having a pattern, reading a previously stored packet (80) of data following the first header data (82) from a storage media (48) within the media storage device (40), the previously stored packet (80) of data including a packet header (76), stripping the first header data (82) from the previously stored packet (80) of data at the media storage device (40) thereby forming a retrieved packet (74) of data and transmitting the retrieved packet (74) of data to another device.

The elements of Claim 19, directed to one embodiment of the present invention, are described in the Specification at page 11, line 23 through page 12, line 10; page 13, lines 21-26; page 15, line 11 through page 16, line 26; page 20, line 24 through page 21, line 14 and the accompanying Figures 3, 4A, 4B, 5, 7 and 10. A computer readable medium described there comprises a meta data header (82) added to received packets (80) by a media storage device (40) as the packets (80) are recorded on storage media (48) within the media storage device (40), each of the received packets (80) including an existing header (76) to which the meta data header (82) is added such that the received packets (80) include both an existing header (76) and a meta data header (82), the meta data header (82) described there comprises a cycle mark value including a pattern used to locate cycle boundaries within the received packets (80) and a cycle count value specifying a cycle number of a cycle in which the received packets (80) are received.

The elements of Claim 24, directed to one embodiment of the present invention, are described in the Specification at page 13, line 1 through page 15, line 10; page 16, line 17 through page 17, line 7; page 17, line 14 through page 18, line 14; page 20, line 24 through page 21, line 13; page 22, lines 1-19 and the accompanying Figures 3, 4A, 4B, 5, 7 and 10. The media storage device described there comprises means for interfacing (42) configured for receiving a stream of data, thereby forming a received stream of data, and also for transmitting a retrieved stream of data, the received stream of data including packet header data (76); means for storing (48) data for storing and retrieving the received stream of data; and means for processing (44) coupled to the means for interfacing (42) and to the means for storing (48) for adding meta header data (82) to the received stream of data as the received stream of data is received at the media storage device (40), such that each packet (80) within the received stream of data includes both packet header data (76) and meta header data (82), and providing the meta header data (82) and the received stream of data to the means for storing (48) for recording thereby forming a

recorded stream of data, the meta header data (82) including a cycle mark value marking cycle boundaries within the recorded stream of data.

Means for interfacing referred to in the specification as an interface circuit (42) is shown in Figure 3. The IEEE 1394-1995 serial bus interface circuit (42) receives a stream of data from the IEEE 1394-1995 serial bus. The interface circuit (42) then forwards this data to the embedded stream processor (44). [Present Specification, page 13, lines 21-23]

Means for storing referred to in the specification as a storage media (48) is shown in Figure 3. The storage management circuit (46) then manages the storage of the stream of data including the meta data headers onto the storage media (48). [Present Specification, page 13, lines 25-26]

Means for processing referred to in the specification as an embedded stream processor (44) is shown in Figure 3. The embedded stream processor (44) adds the meta data headers into the stream of data, as appropriate. [Present Specification, page 13, lines 23-25]

The elements of Claim 30, directed to one embodiment of the present invention, are described in the Specification at page 13, line 1 through page 15, line 10; page 16, line 17 through page 17, line 7; page 17, line 14 through page 18, line 14; page 20, line 24 through page 21, line 13; page 22, lines 1-19 and the accompanying Figures 3, 4A, 4B, 5, 7 and 10. The media storage device described there comprises an interface circuit (42) configured to receive a stream of data, thereby forming a received stream of data, and also to transmit a retrieved stream of data, the received stream of data including packet header data (76), storage media (48) configured to store and retrieve the received stream of data and an embedded stream processor (44) coupled to the interface circuit (42) and to the storage media (48) to add meta header data (82) to the received stream of data as it is received at the media storage device (40), such that each packet within the received stream of data includes both packet header data (76) and meta header data (82), and provide the meta header data (82) and the received stream of data to the storage media (48) for recording to form a recorded stream of data, the meta header data (82) including a cycle mark value marking cycle boundaries within the recorded stream of data.

The elements of Claim 44, directed to one embodiment of the present invention, are described in the Specification at page 11, line 23 through page 12, line 10; page 13, lines 21-26; page 15, line 11 through page 16, line 26; page 20, line 24 through page 21, line 14 and the accompanying Figures 3, 4A, 4B, 5, 7 and 10. The method of writing data to a media storage device there comprises receiving a received packet (74) of data to be written to the media storage device (40), the received packet (74) of data including a packet header (76), adding a meta header

(82) to the received packet (74) of data at the media storage device (40) thereby forming an extended packet (80) of data which includes both the packet header (76) and the meta header (82), wherein the received packet (74) of data is an isochronous packet of data received over an isochronous channel and storing the extended packet (80) of data onto a storage media (48) within the media storage device (40).

The elements of Claim 50, directed to one embodiment of the present invention, are described in the Specification at page 11, line 23 through page 12, line 10; page 13, lines 21-26; page 15, line 11 through page 16, line 26; page 20, line 24 through page 21, line 14 and the accompanying Figures 3, 4A, 4B, 5, 7 and 10. The method of writing data to a media storage device described there comprises receiving a received packet (74) of data to be written to the media storage device (40), the received packet (74) of data including a packet header (76) and a common isochronous packet header (78), adding a meta data header (82) to the received packet (74) of data at the media storage device (40) thereby forming an extended packet (80) of data which includes the packet header (76), the common isochronous packet header (78) and the meta data header (82) and storing the extended packet (80) of data onto a storage media (48) within the media storage device (40).

The elements of Claim 51, directed to one embodiment of the present invention, are described in the Specification at page 13, line 1 through page 15, line 10; page 16, line 17 through page 17, line 7; page 17, line 14 through page 18, line 14; page 20, line 24 through page 21, line 13; page 22, lines 1-19 and the accompanying Figures 3, 4A, 4B, 5, 7 and 10. The media storage device described there comprises an interface circuit (42) configured to receive a stream of data, thereby forming a received stream of data, and also to transmit a retrieved stream of data, storage media (48) configured to store and retrieve the received stream of data, wherein the received stream of data includes one or more received packets (74) of data, each including both a packet header (76) and a common isochronous packet header (78) and an embedded stream processor (44) coupled to the interface circuit (42) and to the storage media (48) to add a meta data header (82) to each received packet (74) in the received stream of data as it is received at the media storage device (40), thereby forming an extended packet (80) of data, and provide the extended packet (80) of data to the storage media (48) for recording to form a recorded stream of data, the meta data header (82) including a cycle mark value marking cycle boundaries within the recorded stream of data.

The elements of Claim 52, directed to one embodiment of the present invention, are described in the Specification at page 11, line 23 through page 12, line 10; page 13, lines 21-26;

page 15, line 11 through page 16, line 26; page 20, line 24 through page 21, line 14 and the accompanying Figures 3, 4A, 4B, 5, 7 and 10. The method of writing data to a media storage device described there comprises receiving a received packet (74) of data to be written to the media storage device (40), the received packet (74) of data including a packet header (76), wherein the media storage device (40) maintains the packet header (76) with the received packet (74) of data, adding a meta data header (82) to the received packet (74) of data at the media storage device (40) thereby forming an extended packet (80) of data including both the packet header (76) and the meta data header (82) and storing the extended packet (80) of data onto a storage media (48) within the media storage device (40).

The elements of Claim 53, directed to one embodiment of the present invention, are described in the Specification at page 11, line 23 through page 12, line 10; page 13, lines 21-26; page 15, line 11 through page 16, line 26; page 20, line 24 through page 21, line 14 and the accompanying Figures 3, 4A, 4B, 5, 7 and 10. A computer readable medium described there comprises a meta data header (82) added to received packets (74) by a media storage device (40) as the packets (74) are recorded on storage media (48) within the media storage device (40), each of the received packets (74) including an existing header (76), wherein the media storage device (40) maintains the existing header (76) with the received packets (74), the meta data header (82) described there comprises a cycle mark value including a pattern used to locate cycle boundaries within the received packets (74) and a cycle count value specifying a cycle number of a cycle in which the received packets (74) are received.

The elements of Claim 54, directed to one embodiment of the present invention, are described in the Specification at page 13, line 1 through page 15, line 10; page 16, line 17 through page 17, line 7; page 17, line 14 through page 18, line 14; page 20, line 24 through page 21, line 13; page 22, lines 1-19 and the accompanying Figures 3, 4A, 4B, 5, 7 and 10. The media storage device described there comprises an interface circuit (42) configured to receive a stream of data, thereby forming a received stream of data, and also to transmit a retrieved stream of data, the received stream of data including packet header data (76), storage media (48) configured to store and retrieve the received stream of data and an embedded stream processor (44) coupled to the interface circuit (42) and to the storage media (48) to add meta header data (82) to the received stream of data as it is received at the media storage device (40) and provide the meta header data (82) and the received stream of data, including the packet header data (76), to the storage media (48) for recording to form a recorded stream of data, the meta header data (82) including a cycle mark value marking cycle boundaries within the recorded stream of data.

VI. GROUNDS OF REJECTION AND OTHER MATTERS TO BE REVIEWED ON APPEAL

The following issues are presented in this Appeal Brief for review by the Board of Patent Appeals and Interferences:

1. Whether Claims 19-23 and 53 are properly rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter.
2. Whether Claims 1-15, 19-35 and 44-54 are properly rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,675,177 to Webb (Hereinafter, "Webb").

VII. ARGUMENT

Grounds for Rejection

Within the Office Action, Claims 19-23 and 53 have been rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Examiner cites State Street Bank & Trust Co. v. Signature Financial Group, Inc., 149 F.3d 1368 (Fed.Cir. 1998) for the proposition that the present invention recited in Claims 19-23 and 53 is directed to non-statutory subject matter because the claimed invention does not produce a "useful, concrete and tangible result." (Id. at 1373).

Outline of Arguments

In the discussion that follows, the Applicants discuss in detail the useful, concrete and tangible result obtained with the present invention.

1. The present invention recited in Claims 19-23 and 53 produces a useful, concrete and tangible result by enabling real-time playback of time sensitive data stored on the computer readable medium through use of timing information stored in the meta data header.

A primary purpose of the present invention is the recording and playback of time sensitive data such as audio and video transmitted to and from a media storage device via an inexpensive high speed bus such as defined by IEEE Std 1394-1995 "1394 Standard for A High Performance Serial Bus" (Specification at page 5, lines 8-16). The claimed invention is not

limited to the IEEE 1394 bus standard, isochronous data transfers, and audio and visual data streams. The following discussion is so limited for simplicity to exemplify a specific useful, concrete and tangible result obtained by the invention recited in Claims 19-23 and 53.

Transmission of time sensitive data on a serial bus compliant with the IEEE 1394 standard is based on a universal clock called a cycle timer which is used to synchronize isochronous data transfers on all nodes connected to the bus. [Present Specification, page 1, lines 18-20]. A media storage device receives isochronous data packets from a source device on an IEEE 1394 serial bus, an embedded processor adds a meta data header containing a cycle timer value (the cycle count) and a cycle mark value to locate cycle boundaries within the received packets to the received isochronous packets, and stores them on a storage media. [Present Specification, page 5, line 25 through page 6, line 7]. The computer readable medium claimed in Claim 19 is such a storage media upon which data has been stored according to the above method.

Storing the cycle count and cycle mark in a meta data header with the received isochronous data packets enables real-time playback of the stored isochronous data packets by associating isochronous data packets for playback with the cycle count and cycle mark needed to synchronize the packets to the IEEE 1394 serial bus during playback. [Present Specification, page 6, line 25 through page 7 line 10]. In addition to playback, storing the cycle count and cycle mark in a meta data header with the isochronous data packets facilitates such practical playback features as fast-forward and rewind which can be accomplished by sequencing the isochronous packet transmissions using the cycle count and cycle mark in the meta data header stored with the isochronous data packets.

The computer readable medium described in Claim 19 is a storage medium wherein a meta data header containing cycle count and cycle mark values has been added to received data packets by a media storage device as the packets are recorded on the storage media within the media storage device. As described above, such a computer readable medium used within a media storage device produces a useful, concrete and tangible result by enabling real-time playback of time-sensitive data stored on the computer readable medium through use of timing information stored in the meta data header with the isochronous data packets on the computer readable media. For at least these reasons, the independent Claims 19 and 53 which recite the computer readable medium described above produce a useful, concrete and tangible result and are allowable statutory subject matter. Claims 20-23 are also allowable as being dependent upon allowable base Claim 19. Accordingly, Claims 19-23 and 53 are all allowable.

Grounds for Rejection

Within the Office Action, Claims 1-15, 19-35 and 44-54 have been rejected under 35 U.S.C. § 102(e) as being anticipated by Webb.

Outline of Arguments

In the discussion that follows, Applicants discuss the teachings of Webb. As will be discussed in detail below, Webb teaches requiring transmittal of files from the client to the backup system with a meta data header preceding, and a meta data footer following, each file transmitted from the client. Webb does not teach that a meta data header is added to a *received packet*. Webb also does not teach that a meta data header is added to a *received packet* at a media storage device. Webb also does not teach *stripping* header data from a previously stored packet of data at a media storage device and *transmitting* the retrieved packet of data to another device.

1. Webb does not teach adding a meta data header to a received packet and stripping header data before transmitting a retrieved packet of data.

Webb teaches a method and system for backing up digital data. Webb teaches that at each backup interval, the computer system sends all files created or modified since the time stamp to the backup system. [Webb, Abstract] Webb further teaches that the file stream flowing *from the computer system* to the backup system *contains metadata* at the boundaries of each file. [Webb, Abstract] Webb does not teach that a *meta data header* is added to a *received packet* of data *at a media storage device*. Webb teaches that the server sends meta data for each directory and meta and file stream data for each file on the client volume. [Webb, col. 6, line 64 - col. 7, line 1] Webb also teaches that a meta file is a file that contains a meta header and a meta entry for each file or directory that exists on a client's computer system at this backup time. [Webb, col. 7, lines 1-3] Webb does not teach that a meta data header is added to a *received packet*. Webb teaches that the meta file and the data file are stored separately at the server. [Webb, col. 7, lines 9-14] Webb also does not teach that a meta data header is added to a *received packet* at a media storage device. As described above, Webb teaches that the file stream flowing *from the computer system* to the backup system *contains meta data* at the boundaries of each file. [Webb, Abstract] Webb also does not teaching *stripping* header data from a previously stored packet of data at a media storage device and *transmitting* the retrieved packet of data to another device.

In contrast to the teachings of Webb, the apparatus and method of the present invention receives a received packet of data to be written to the media storage device, adds a meta data header to the *received packet* of data at the media storage device thereby forming an extended packet of data, and stores the extended packet of data onto a media within the media storage device. The extended packet of data includes the packet header *and* the meta data header.

In one embodiment of the present invention, referring to Figs. 4A and 4B, a series of source packets 60-63 is generated at a source device 50. The source device 50 then applies source packet headers 68-71 to each of the source packets 60-63, respectively. The source device 50 then splits the combination source packets and source packet headers into data blocks, with each source packet being split into multiple data blocks. Some number of the data blocks are then combined into an isochronous packet and the isochronous header and the common isochronous packet (CIP) header are then applied to the isochronous packet by the source device 50. Once the isochronous and CIP headers are applied to the isochronous data packet, the packet is then transmitted by the source device 50 over the IEEE 1394-1995 serial bus to the media storage device 40 of the present invention. When the packet is *received* by the media storage device 40, *a meta-data header is added* by the media storage device 40 to the *received packet*.

As described above, Webb does not teach that a meta data header is added to a *received packet*. Webb teaches that the meta file and the data file are stored separately at the server. [Webb, col. 7, lines 9-14] Webb also does not teach that a meta data header is added to a *received packet at a media storage device*. As described above, Webb teaches that the file stream flowing *from the computer system* to the backup system *contains metadata* at the boundaries of each file. [Webb, Abstract]

Figure 13 of Webb is a flow chart illustrating the steps of a full network backup according to the teachings of Webb. [Webb, column 4, line 44]. The first step taught by Webb is a full backup of the client data files. The first step in a full backup of the client data files, step 104 labeled "Client Sends Meta Entry for the Next File or Directory", *requires* that the client transmit meta data before transmitting file data in order to execute the backup process, and at step 105 labeled "Client Sends File Data and a File Stream Footer to the Server" the process further requires that the file data be followed by a meta footer transmitted by the client. Moreover, the requirement of a meta data header preceding the file data and a meta data footer following the file data is reiterated in Figure 21A of Webb illustrating the steps to perform an incremental network merge backup. [Webb, column 5, lines 1-3]. Figure 21A, step140a labeled

"Client Sends Meta Data for the Next File or Directory..." *requires* that the client send a meta data header before sending the file data. Step 150a labeled "Client Sends File Data and a File Stream Footer to the Server" reiterates that the process taught by Webb *requires* that the client send a meta data header, then the file data, followed by a meta data footer. Webb does not teach the backup server receiving a data file from the client without the client first transmitting a meta data header preceding the data file and then transmitting a meta footer following the data file.

2. The claims distinguish over Webb.

The claims are grouped separately below to indicate that they do not stand or fall together.

a. Claims 1-7

The independent Claim 1 is directed to a method of writing data to a media storage device. The method of Claim 1 comprises receiving a received packet of data to be written to the media storage device, the received packet of data including a packet header, adding a meta data header to the *received packet* of data at the media storage device thereby forming an extended packet of data including both the packet header and the meta data header, and storing the extended packet of data onto a media within the media storage device. As described above, Webb does not teach that a meta data header is added to a *received packet*. Webb teaches that the meta file and the data file are stored separately at the server. [Webb, col. 7, lines 9-14] Webb also does not teach adding a meta data header to the *received packet* of data *at the media storage device*. As described above, Webb teaches that the file stream flowing *from the computer system* to the backup system *contains metadata* at the boundaries of each file. [Webb, Abstract] For at least these reasons, the independent Claim 1 is allowable over the teachings of Webb.

Claims 2-7 are all dependent on the independent Claim 1. As discussed above, the independent Claim 1 is allowable over the teachings of Webb. Accordingly, the dependent Claims 2-7 are all also allowable as being dependent on an allowable base claim.

b. Claims 8-15

The independent Claim 8 is directed to a method of reading data from a media storage device which has previously been stored with header data generated by the media storage device. The method of Claim 8 comprises locating a first header data, including a cycle mark value having a pattern, reading a previously stored packet of data following the first header data from a

media within the media storage device, the previously stored packet of data including a packet header, *stripping* the first header data from the *previously stored packet of data* at the media storage device thereby forming a retrieved packet of data, and *transmitting* the retrieved packet of data to another device. As described above, Webb does not teach *stripping* first header data from the previously stored packet of data *at the media storage device* and *transmitting* the retrieved packet of data to another device. For at least these reasons, the independent Claim 8 is allowable over the teachings of Webb.

Claims 9-15 are all dependent on the independent Claim 8. As discussed above, the independent Claim 8 is allowable over the teachings of Webb. Accordingly, the dependent Claims 9-15 are all also allowable as being dependent on an allowable base claim.

c. Claims 19-23

The independent Claim 19 is directed to a computer readable medium comprising a meta data header added to *received packets* by a media storage device as the packets are recorded on storage media within the media storage device, each of the received packets including an existing header to which the meta data header is added such that the *received packets* include both an existing header and a meta data header. The meta data header of Claim 19 comprises a cycle mark value including a pattern used to locate cycle boundaries within the received packets and a cycle count value specifying a cycle number of a cycle in which the received packets are received. As described above, Webb does not teach that a meta data header is added to a *received packet*. Webb teaches that the meta file and the data file are stored separately at the server. [Webb, col. 7, lines 9-14] Webb also does not teach adding a meta data header to the received packet of data *at the media storage device*. As described above, Webb teaches that the file stream flowing *from the computer system* to the backup system *contains metadata* at the boundaries of each file. [Webb, Abstract] For at least these reasons, the independent Claim 19 is allowable over the teachings of Webb.

Claims 20-23 are all dependent on the independent Claim 19. As discussed above, the independent Claim 19 is allowable over the teachings of Webb. Accordingly, the dependent Claims 20-23 are all also allowable as being dependent on an allowable base claim.

d. Claims 24-29

The independent Claim 24 is directed to a media storage device. The media storage device of Claim 24 comprises means for interfacing configured for receiving a stream of data, thereby forming a received stream of data, and also for transmitting a retrieved stream of data,

the received stream of data including packet header data, means for storing data for storing and retrieving the received stream of data, and means for processing coupled to the means for interfacing and to the means for storing for adding meta header data to the *received stream of data* as the received stream of data is received at the media storage device, such that each packet within the received stream of data includes both packet header data and meta header data, and providing the meta header data and the received stream of data to the means for storing for recording thereby forming a recorded stream of data, the meta header data including a cycle mark value marking cycle boundaries within the recorded stream of data. As described above, Webb does not teach that a meta data header is added to a *received packet*. Webb teaches that the meta file and the data file are stored separately at the server. [Webb, col. 7, lines 9-14] Webb also does not teach adding a meta data header to the *received packet* of data *at the media storage device*. As described above, Webb teaches that the file stream flowing *from the computer system* to the backup system *contains metadata* at the boundaries of each file. [Webb, Abstract] For at least these reasons, the independent Claim 24 is allowable over the teachings of Webb.

Claims 25-29 are all dependent on the independent Claim 24. As discussed above, the independent Claim 24 is allowable over the teachings of Webb. Accordingly, the dependent Claims 25-29 are all also allowable as being dependent on an allowable base claim.

e. Claims 30-35

The independent Claim 30 is directed to a media storage device. The media storage device of Claim 30 comprises an interface circuit configured to receive a stream of data, thereby forming a received stream of data, and also to transmit a retrieved stream of data, the received stream of data including packet header data, storage media configured to store and retrieve the received stream of data, and an embedded stream processor coupled to the interface circuit and to the storage media to add meta header data to the *received stream of data* as it is received at the media storage device, such that each packet within the received stream of data includes both packet header data and meta header data, and provide the meta header data and the received stream of data to the storage media for recording to form a recorded stream of data, the meta header data including a cycle mark value marking cycle boundaries within the recorded stream of data. As described above, Webb does not teach that a meta data header is added to a *received packet*. Webb teaches that the meta file and the data file are stored separately at the server. [Webb, col. 7, lines 9-14] Webb also does not teach adding a meta data header to the *received packet* of data *at the media storage device*. As described above, Webb teaches that the file stream flowing *from the computer system* to the backup system *contains metadata* at the

boundaries of each file. [Webb, Abstract] For at least these reasons, the independent Claim 30 is allowable over the teachings of Webb.

Claims 31-35 are all dependent on the independent Claim 30. As discussed above, the independent Claim 30 is allowable over the teachings of Webb. Accordingly, the dependent Claims 31-35 are all also allowable as being dependent on an allowable base claim.

f. Claims 44-49

The independent Claim 44 is directed to a method of writing data to a media storage device. The method of Claim 44 comprises receiving a received packet of data to be written to the media storage device, the received packet of data including a packet header, adding a meta header to the *received packet* of data at the media storage device thereby forming an extended packet of data which includes both the packet header and the meta header, wherein the received packet of data is an isochronous packet of data received over an isochronous channel, and storing the extended packet of data onto a media within the media storage device. As described above, Webb does not teach that a meta data header is added to a *received packet*. Webb teaches that the meta file and the data file are stored separately at the server. [Webb, col. 7, lines 9-14] Webb also does not teach adding a meta data header to the *received packet* of data *at the media storage device*. As described above, Webb teaches that the file stream flowing *from the computer system* to the backup system *contains metadata* at the boundaries of each file. [Webb, Abstract] For at least these reasons, the independent Claim 44 is allowable over the teachings of Webb.

Claims 45-49 are all dependent on the independent Claim 44. As discussed above, the independent Claim 44 is allowable over the teachings of Webb. Accordingly, the dependent Claims 45-49 are all also allowable as being dependent on an allowable base claim.

g. Claim 50

The independent Claim 50 is directed to a method of writing data to a media storage device. The method of Claim 50 comprises receiving a received packet of data to be written to the media storage device, the received packet of data including a packet header and a common isochronous packet header, adding a meta data header to the *received packet* of data at the media storage device thereby forming an extended packet of data which includes the packet header, the common isochronous packet header and the meta data header and storing the extended packet of data onto a media within the media storage device. As described above, Webb does not teach that a meta data header is added to a *received packet*. Webb teaches that the meta file and the data file are stored separately at the server. [Webb, col. 7, lines 9-14] Webb also does not teach

adding a meta data header to the *received packet* of data *at the media storage device*. As described above, Webb teaches that the file stream flowing *from the computer system* to the backup system *contains metadata* at the boundaries of each file. [Webb, Abstract] For at least these reasons, the independent Claim 50 is allowable over the teachings of Webb.

h. Claim 51

The independent Claim 51 is directed to a media storage device. The media storage device of Claim 51 comprises an interface circuit configured to receive a stream of data, thereby forming a received stream of data, and also to transmit a retrieved stream of data, storage media configured to store and retrieve the received stream of data, wherein the received stream of data includes one or more received packets of data, each including both a packet header and a common isochronous packet header, and an embedded stream processor coupled to the interface circuit and to the storage media to add a meta data header to each *received packet* in the received stream of data as it is received at the media storage device, thereby forming an extended packet of data, and provide the extended packet of data to the storage media for recording to form a recorded stream of data, the meta data header including a cycle mark value marking cycle boundaries within the recorded stream of data. As described above, Webb does not teach that a meta data header is added to a *received packet*. Webb teaches that the meta file and the data file are stored separately at the server. [Webb, col. 7, lines 9-14] Webb also does not teach adding a meta data header to the *received packet* of data *at the media storage device*. As described above, Webb teaches that the file stream flowing *from the computer system* to the backup system *contains metadata* at the boundaries of each file. [Webb, Abstract] For at least these reasons, the independent Claim 51 is allowable over the teachings of Webb.

i. Claim 52

The independent Claim 52 is directed to a method of writing data to a media storage device. The method of Claim 52 comprises receiving a received packet of data to be written to the media storage device, the received packet of data including a packet header, wherein the media storage device maintains the packet header with the received packet of data, adding a meta data header to the *received packet* of data at the media storage device thereby forming an extended packet of data including both the packet header and the meta data header; and storing the extended packet of data onto a media within the media storage device. As described above, Webb does not teach that a meta data header is added to a *received packet*. Webb teaches that the meta file and the data file are stored separately at the server. [Webb, col. 7, lines 9-14] Webb

also does not teach adding a meta data header to the *received packet* of data *at the media storage device*. As described above, Webb teaches that the file stream flowing *from the computer system* to the backup system *contains metadata* at the boundaries of each file. [Webb, Abstract] For at least these reasons, the independent Claim 52 is allowable over the teachings of Webb.

j. Claim 53

The independent Claim 53 is directed to a computer readable medium comprising a meta data header added to *received packets* by a media storage device as the packets are recorded on storage media within the media storage device, each of the received packets including an existing header, wherein the media storage device maintains the existing header with the received packets. It is specified in Claim 53 that the meta data header comprises a cycle mark value including a pattern used to locate cycle boundaries within the received packets; and a cycle count value specifying a cycle number of a cycle in which the received packets are received. As described above, Webb does not teach that a meta data header is added to a *received packet*. Webb teaches that the meta file and the data file are stored separately at the server. [Webb, col. 7, lines 9-14] Webb also does not teach adding a meta data header to the *received packet* of data *at the media storage device*. As described above, Webb teaches that the file stream flowing *from the computer system* to the backup system *contains metadata* at the boundaries of each file. [Webb, Abstract] For at least these reasons, the independent Claim 53 is allowable over the teachings of Webb.

k. Claim 54

The independent Claim 54 is directed to a media storage device comprises an interface circuit configured to receive a stream of data, thereby forming a received stream of data, and also to transmit a retrieved stream of data, the received stream of data including packet header data, storage media configured to store and retrieve the received stream of data; and an embedded stream processor coupled to the interface circuit and to the storage media to add meta header data to the *received stream of data* as it is received at the media storage device and provide the meta header data and the received stream of data, including the packet header data, to the storage media for recording to form a recorded stream of data, the meta header data including a cycle mark value marking cycle boundaries within the recorded stream of data. As described above, Webb does not teach that a meta data header is added to a *received packet*. Webb teaches that the meta file and the data file are stored separately at the server. [Webb, col. 7, lines 9-14] Webb also does not teach adding a meta data header to the *received packet* of data *at the media storage*

device. As described above, Webb teaches that the file stream flowing *from the computer system* to the backup system *contains metadata* at the boundaries of each file. [Webb, Abstract] For at least these reasons, the independent Claim 54 is allowable over the teachings of Webb.

3. CONCLUSION

For the above reasons, it is respectfully submitted that the Claims 19-23 and 53 are directed to statutory subject matter under 35 U.S.C. § 101 and as set forth in State Street Bank & Trust Co. v. Signature Financial Group, Inc. It is also respectfully submitted that the Claims 1-15, 19-35 and 44-54 are allowable over the cited prior art references. Therefore, a favorable indication is respectfully requested.

Respectfully submitted,
HAVERSTOCK & OWENS LLP

Dated: July 20, 2007

By: Jonathan O. Owens
Jonathan O. Owens
Reg. No.: 37,902
Attorneys for Applicants

VIII. CLAIMS APPENDIX

This appendix includes a list of the claims under appeal.

1. A method of writing data to a media storage device comprising:
   a. receiving a received packet of data to be written to the media storage device, the received packet of data including a packet header;
   b. adding a meta data header to the received packet of data at the media storage device thereby forming an extended packet of data including both the packet header and the meta data header; and
   c. storing the extended packet of data onto a media within the media storage device.

2. The method as claimed in claim 1 wherein the meta data header includes a cycle mark value which includes a pattern used to locate cycle boundaries, and a cycle count value specifying a cycle number of a cycle in which the received packet of data was received.

3. The method as claimed in claim 1 wherein the received packet of data is an isochronous packet of data received over an isochronous channel.

4. The method as claimed in claim 1 wherein receiving the received packet of data includes receiving packets of data on multiple channels and further wherein adding a header to the received packet of data includes grouping packets received on multiple channels within a same isochronous cycle into a cycle group of packets and adding the header to the cycle group of packets.

5. The method as claimed in claim 1 wherein adding a header to the received packet of data is performed by an embedded stream processor within the media storage device.

6. The method as claimed in claim 1 wherein the received packet of data is received from a bus structure which complies with a version of an IEEE 1394 standard.

7. The method as claimed in claim 1 wherein the media storage device is a hard disk drive.

8. A method of reading data from a media storage device which has previously been stored with header data generated by the media storage device comprising:

a. locating a first header data, including a cycle mark value having a pattern;

b. reading a previously stored packet of data following the first header data from a media within the media storage device, the previously stored packet of data including a packet header;

c. stripping the first header data from the previously stored packet of data at the media storage device thereby forming a retrieved packet of data; and

d. transmitting the retrieved packet of data to another device.

9. The method as claimed in claim 8 wherein transmitting includes transmitting the manipulated packet of data onto a bus structure which complies with a version of an IEEE 1394 standard.

10. The method as claimed in claim 8 wherein the pattern is used to locate cycle boundaries, and the first header data further includes a cycle count value specifying a cycle number of a cycle in which the previously stored packet of data was received.

11. The method as claimed in claim 8 wherein the retrieved packet is an isochronous packet of data and is transmitted over an isochronous channel.

12. The method as claimed in claim 8 wherein stripping the first header data from the previously stored packet of data is performed by an embedded stream processor within the media storage device.

13. The method as claimed in claim 8 wherein the media storage device is a hard disk drive.

14. The method as claimed in claim 8 wherein locating the first header data, including a cycle mark value having a pattern includes locating the pattern within the previously stored data, then determining if a cycle count value within the first header data is within an appropriate range, determining if an isochronous header follows the first header data and then determining a data length value.

15. The method as claimed in claim 14 wherein the appropriate range is any number including and between 0 and 7999.

16-18. (canceled)

19. A computer readable medium comprising a meta data header added to received packets by a media storage device as the packets are recorded on storage media within the media storage device, each of the received packets including an existing header to which the meta data header is added such that the received packets include both an existing header and a meta data header, the meta data header comprising:

a. a cycle mark value including a pattern used to locate cycle boundaries within the received packets; and

b. a cycle count value specifying a cycle number of a cycle in which the received packets are received.

20. The computer readable medium as claimed in claim 19 wherein the cycle count value has a range between and including 0 and 7999.

21. The computer readable medium as claimed in claim 19 wherein the received packets are isochronous data packets.

22. The computer readable medium as claimed in claim 19 wherein the meta data header is added to each received packet.

23. The computer readable medium as claimed in claim 19 wherein the meta data header is added to each group of received packets received during a same isochronous cycle.

24. A media storage device comprising:

a. means for interfacing configured for receiving a stream of data, thereby forming a received stream of data, and also for transmitting a retrieved stream of data, the received stream of data including packet header data;

b. means for storing data for storing and retrieving the received stream of data; and

c. means for processing coupled to the means for interfacing and to the means for storing for adding meta header data to the received stream of data as the received stream of data is received at the media storage device, such that each packet within the received stream of data includes both packet header data and meta header data, and providing the meta header data and the received stream of data to the means for storing for recording thereby forming a recorded stream of data, the meta header data including a cycle mark value marking cycle boundaries within the recorded stream of data.

25. The media storage device as claimed in claim 24 wherein the means for processing is an embedded stream processor which also locates a first cycle mark value within the recorded stream of data during a playback operation, reads packets within the recorded stream of data after the first cycle mark value, strips the header data from read packets within the recorded stream of data thereby forming retrieved packets of data and transmits the retrieved packets of data through the means for interfacing to a receiving device.

26. The media storage device as claimed in claim 25 wherein the receiving device is coupled to the means for interfacing by a bus structure which complies with a version of an IEEE 1394 standard.

27. The media storage device as claimed in claim 25 wherein the embedded stream processor locates the first cycle mark value by locating a pattern included within the cycle mark value, then determining if a cycle count value within the header data is within an appropriate range, determining if an isochronous header follows the header data and then determining a data length value.

28. The media storage device as claimed in claim 27 wherein the appropriate range is any number including and between 0 and 7999.

29. The media storage device as claimed in claim 24 wherein the header data further includes a cycle count value specifying a cycle number of a cycle in which packets of data within the received stream of data were received.

30. A media storage device comprising:

a. an interface circuit configured to receive a stream of data, thereby forming a received stream of data, and also to transmit a retrieved stream of data, the received stream of data including packet header data;

b. storage media configured to store and retrieve the received stream of data; and

c. an embedded stream processor coupled to the interface circuit and to the storage media to add meta header data to the received stream of data as it is received at the media storage device, such that each packet within the received stream of data includes both packet header data and meta header data, and provide the meta header data and the received stream of data to the storage media for recording to form a recorded stream of data, the meta header data including a cycle mark value marking cycle boundaries within the recorded stream of data.

31. The media storage device as claimed in claim 30 wherein the embedded stream processor also locates a first cycle mark value within the recorded stream of data during a playback operation, reads packets within the recorded stream of data after the first cycle mark value, strips the header data from read packets within the recorded stream of data thereby forming retrieved packets of data and transmits the retrieved packets of data through the interface circuit to a receiving device.

32. The media storage device as claimed in claim 31 wherein the receiving device is coupled to the media storage device by a bus structure which complies with a version of an IEEE 1394 standard.

33. The media storage device as claimed in claim 31 wherein the embedded stream processor locates the first cycle mark value by locating a pattern included within the cycle mark value, then determining if a cycle count value within the header data is within an appropriate range,

determining if an isochronous header follows the header data and then determining a data length value.

34. The media storage device as claimed in claim 33 wherein the appropriate range is any number including and between 0 and 7999.

35. The media storage device as claimed in claim 30 wherein the header data further includes a cycle count value specifying a cycle number of a cycle in which packets of data within the received stream of data were received.

36-43. (canceled).

44. A method of writing data to a media storage device comprising:

a. receiving a received packet of data to be written to the media storage device, the received packet of data including a packet header;

b. adding a meta header to the received packet of data at the media storage device thereby forming an extended packet of data which includes both the packet header and the meta header, wherein the received packet of data is an isochronous packet of data received over an isochronous channel; and

c. storing the extended packet of data onto a media within the media storage device.

45. The method as claimed in claim 44 wherein the header includes a cycle mark value which includes a pattern used to locate cycle boundaries, and a cycle count value specifying a cycle number of a cycle in which the received packet of data was received.

46. The method as claimed in claim 44 wherein receiving the received packet of data includes receiving packets of data on multiple channels and further wherein adding a header to the

received packet of data includes grouping packets received on multiple channels within a same isochronous cycle into a cycle group of packets and adding the header to the cycle group of packets.

47. The method as claimed in claim 44 wherein adding a header to the received packet of data is performed by an embedded stream processor within the media storage device.

48. The method as claimed in claim 44 wherein the received packet of data is received from a bus structure which complies with a version of an IEEE 1394 standard.

49. The method as claimed in claim 44 wherein the media storage device is a hard disk drive.

50. A method of writing data to a media storage device comprising:

a. receiving a received packet of data to be written to the media storage device, the received packet of data including a packet header and a common isochronous packet header;

b. adding a meta data header to the received packet of data at the media storage device thereby forming an extended packet of data which includes the packet header, the common isochronous packet header and the meta data header; and

c. storing the extended packet of data onto a media within the media storage device.

51. A media storage device comprising:

a. an interface circuit configured to receive a stream of data, thereby forming a received stream of data, and also to transmit a retrieved stream of data;

b. storage media configured to store and retrieve the received stream of data, wherein the received stream of data includes one or more received packets of data, each including both a packet header and a common isochronous packet header; and

c. an embedded stream processor coupled to the interface circuit and to the storage media to add a meta data header to each received packet in the received stream of data as it is received at the media storage device, thereby forming an extended packet of data, and provide the extended packet of data to the storage media for recording to form a recorded stream of data, the meta data header including a cycle mark value marking cycle boundaries within the recorded stream of data.

52. A method of writing data to a media storage device comprising:

a. receiving a received packet of data to be written to the media storage device, the received packet of data including a packet header, wherein the media storage device maintains the packet header with the received packet of data;

b. adding a meta data header to the received packet of data at the media storage device thereby forming an extended packet of data including both the packet header and the meta data header; and

c. storing the extended packet of data onto a media within the media storage device.

53. A computer readable medium comprising a meta data header added to received packets by a media storage device as the packets are recorded on storage media within the media storage device, each of the received packets including an existing header, wherein the media storage device maintains the existing header with the received packets, the meta data header comprising:

a. a cycle mark value including a pattern used to locate cycle boundaries within the received packets; and

b. a cycle count value specifying a cycle number of a cycle in which the received packets are received.

54. A media storage device comprising:

a. an interface circuit configured to receive a stream of data, thereby forming a received stream of data, and also to transmit a retrieved stream of data, the received stream of data including packet header data;

b. storage media configured to store and retrieve the received stream of data; and

c. an embedded stream processor coupled to the interface circuit and to the storage media to add meta header data to the received stream of data as it is received at the media storage device and provide the meta header data and the received stream of data, including the packet header data, to the storage media for recording to form a recorded stream of data, the meta header data including a cycle mark value marking cycle boundaries within the recorded stream of data.

IX. EVIDENCE APPENDIX

STATEMENT

Pursuant to 37 C.F.R. § 41.37(c)(1)(ix), the following is a statement setting forth where in the record the evidence of this appendix was entered by the examiner:

Evidence Description:	**Where Entered:**
U.S. Pat. No. 6,675,177	Office Action mailed March 28, 2007
Office Action March 28, 2007	Examiner Office Action

X. RELATED PROCEEDINGS APPENDIX

There are no related proceedings.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/608,617	06/30/2000	Scott D Smyers	SONY-12100	9459

28960 7590 03/28/2007
HAVERSTOCK & OWENS LLP
162 NORTH WOLFE ROAD
SUNNYVALE, CA 94086

EXAMINER	
FILIPCZYK, MARCIN R	
ART UNIT	PAPER NUMBER
2163	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/28/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.	Applicant(s)	
09/608,617	SMYERS ET AL.	
Examiner	**Art Unit**	
Marc R. Filipczyk	2163	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 February 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15,19-35 and 44-54* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15,19-35 and 44-54* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 June 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Response to Amendment

This Action is in response to Applicant's amendment filed on February 6, 2007 in which claims 1-15, 19-35 and 44-54 are pending.

To expedite the process of examination Examiner requests that all future correspondences in regard to overcoming prior art rejections or other issues (e.g. amendments, 35 U.S.C. 112, objections and the like) set forth by the Examiner that Applicants provide and link to the most specific page and line numbers of the disclosure where the best support is found (see 35 U.S.C. 132).

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 19-23 and 53 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth whether the invention accomplishes a practical application and whether it generates a useful, concrete and tangible result.

The guidelines explain that a practical application of a 35 U.S.C. 101 judicial exception is claimed if the claimed invention physically transforms an article or physical object to a different state or thing, or if the claimed invention otherwise produces a useful, concrete, and tangible result.

In the present case, independent claims 19 and 53 do not involve transformation of article or physical object to a different state or thing, they merely recite a meta data header. Further, independent claims 19 and 53 do not produce a useful, concrete, and tangible result, but merely

disclose a meta data header without generating a useful, concrete and tangible result. State Street, 149 F.3d at 1373-74, 47 USPQ2d at 1601-02.

Claims 19 and 53 taken as a whole are directed to a mere medium claim, i.e., to only its description or expression, is an abstract idea and does not comprise a practical application as explained above hence are nonstatutory.

Since the claimed invention, as a whole, does not comprise a practical application as explained above, claims 20-23 which depend from claim 19 respectively, are deemed to be directed to non-statutory subject matter.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-15, 19-35 and 44-54 are rejected under 35 U.S.C. 102(e) as being anticipated by Webb (U.S. Patent No. 6,675,177).

Regarding claim 1, Webb discloses a method and system of writing data to a media storage device comprising: (abstract and figs. 1-3)

receiving a received packet of data to be written to the media storage device, the received packet of data including a packet header; (figs. 1-3, col. 7, lines 7-9 and related text)

adding a metadata header to the received packet of data at the media storage device thereby forming an extended packet of data including both the packet header and the meta data header (figs. 3 and 7-9, item 10, col. 6, lines 27-30, *merge* and col. 7, lines 9-26), wherein the packet is an isochronous packet of data (abstract);

(*Note: IEEE 1394-1995 is an international standard for implementing isochronous and asynchronous format data transfers in a network, see Background of Invention of the Instant Application*)

storing the extended packet of data onto a media within the media storage device (figs. 3 and 7-9, item 10, col. 6, lines 27-30, *merge* and col. 7, lines 9-26).

Regarding claim 2, Webb discloses a cycle control to locate cycle boundaries and controlling number of a cycle in which the received packet of data was received (col. 3, lines 9-13 and col. 4, lines 1-8).

Regarding claim 3, Webb discloses received packet of data is an isochronous packet of data received over isochronous channels (figs. 1-3, network).

Regarding claims 4 and 5, Webb discloses adding a header to the received packet of data is performed by an embedded stream processor within a storage device (figs. 1-3, server/cache/tape, also see *additional meta data* on fig. 9).

Regarding claim 6, Webb discloses the network complies with IEEE 1394 standard (see abstract, and figs. 1-3, *network* and col. 15, lines 55-58).

Regarding claim 7, hard disk is inherent from a storage device.

Regarding claims 8-15, 19-35 and 44-54 contain the same subject matter as claims 1-7 and therefore are rejected on the same ground. In addition, regarding Isochronous Headers refer to fig. 9, *Additional Meta Data* and figs. 1-3, and regarding deleting or flushing headers and data refer to col. 7, lines 16-26 of Webb.

Response to Arguments

Applicant's arguments filed on February 6, 2007 have been fully considered but they are not persuasive. The arguments and responses are listed below:

Applicant argues on page 11 that regarding claims 1-23 and 53 have now been amended to include a proper preamble.

Examiner disagrees. Claims 1-23 and 53 are rejected because they do not meet the 35 U.S.C. 101 statutory bar as summarized in the rejection above. They merely claim an abstract idea. However, Applicant has overcome an indefinite rejection against claim 2.

Applicant argues on pages 12-18 regarding independent claims that Webb does not teach "that a meta data header is added to a received packet".

Examiner disagrees. The cited section relative to the argued limitation "fig. 3, 7-9, item 10, col. 6, lines 27-30, *merge* and col. 7, lines 9-26" of Webb teach merging processes, col. 6, lines 27-30. This feature is illustrated in fig. 3, wherein client data is merged with cache data, summarized in col. 3, lines 58-65 and fig. 13. Webb in addition to merging the cache data with client data teaches that additional file headers from an old file stream are written to a new file stream, hence meta data headers, which are headers related by at least a common file stream are stored together and merged, see fig 21A, especially items 156, 158, 160, 162, 164 and 166. Webb in fig. 21B, items 168 to 184 further shows writing meta data to the new cache file.

With respect to all the pending claims 1-15, 19-35 and 44-54, Examiner respectfully traverses Applicant's assertion based on the discussion above, as such, Examiner maintains the same rejections.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following prior art, Traw et al shows in accordance with Applicant's background disclosure that IEEE 1394-1995 is an international standard for transferring asynchronous and isochronous data transfers, in addition, Traw et al teaches cycle control, isochronous channels, packet transmitter/receiver and arbitration.

U.S. Patent No. 6,012,117 of Traw et al.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc R. Filipczyk whose telephone number is (571) 272-4019. The examiner can normally be reached on Mon-Fri, 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

DON WONG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MF
March 21, 2007